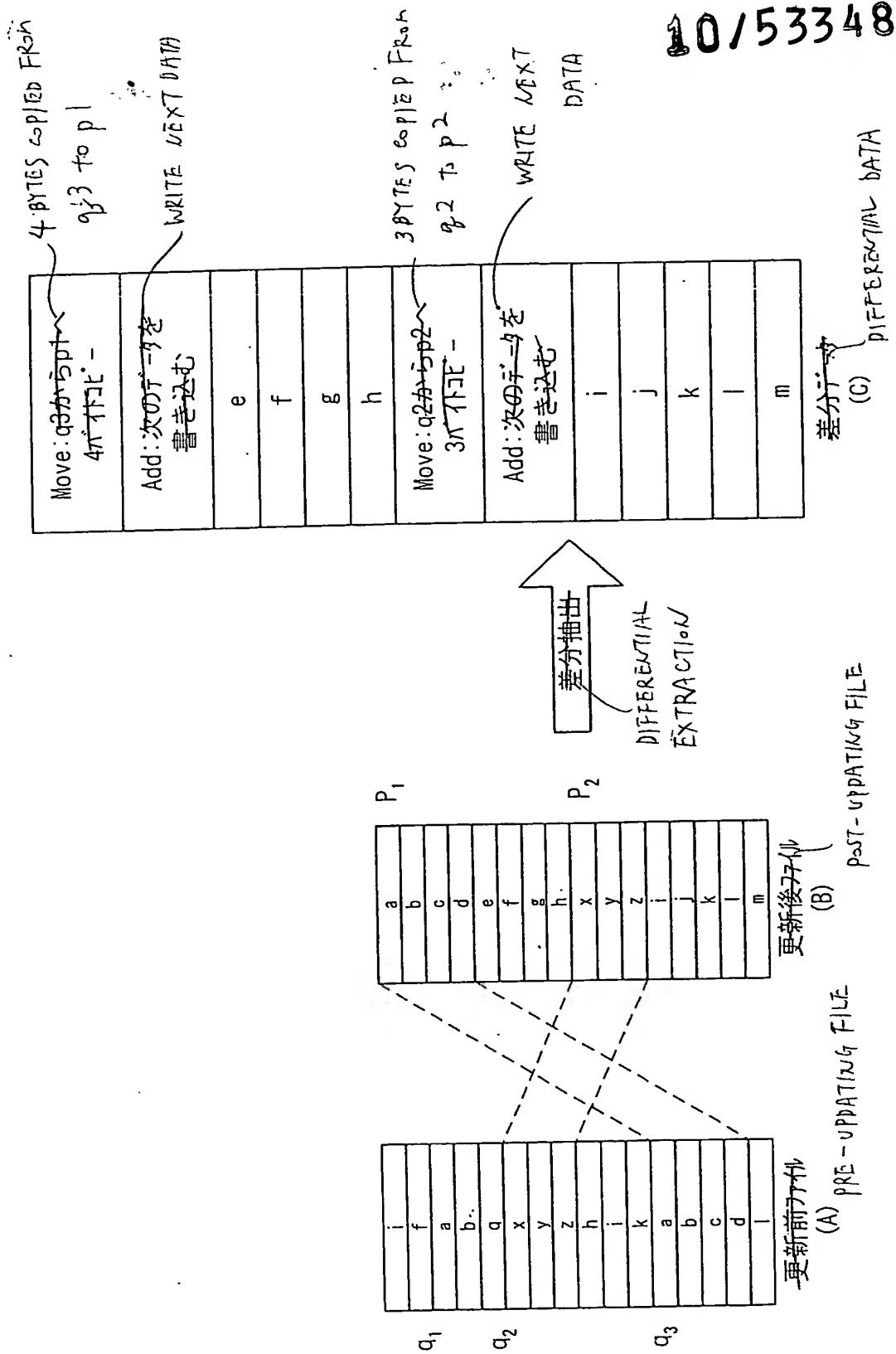




11	DIFFERENTIAL DATA PRODUCING DEVICE
12	SERVER
13	WIRELESS COMMUNICATION NETWORK
14	MOBILE TERMINAL DEVICE
16	DIFFERENTIAL DATA PRODUCING PORTION
17	WIRELESS COMMUNICATION PORTION
18	CONTROL PORTION
19	POST-UPDATING FILE RESTORING PORTION
20	DATA STORING PORTION

Fig. 2



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Fig. 3

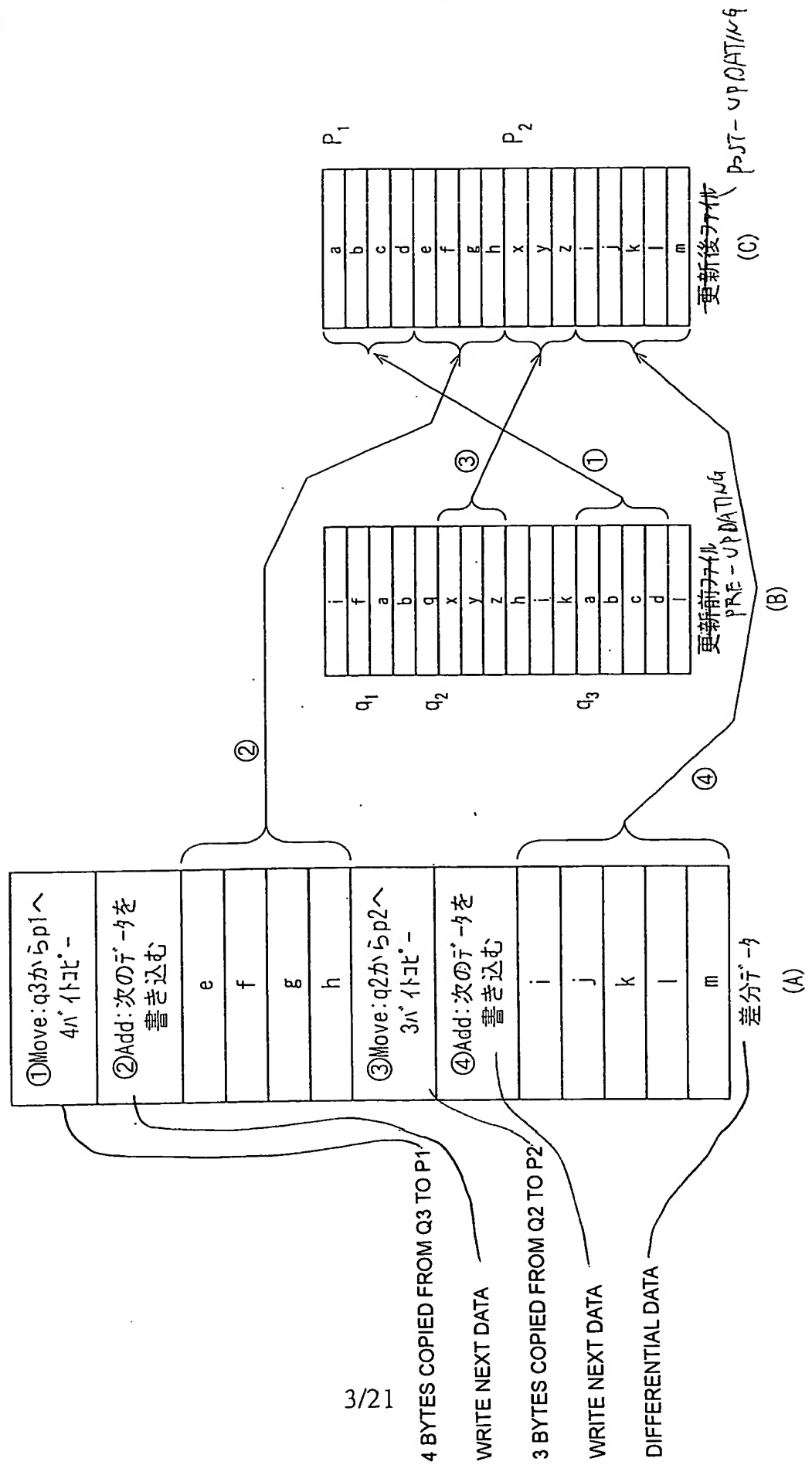
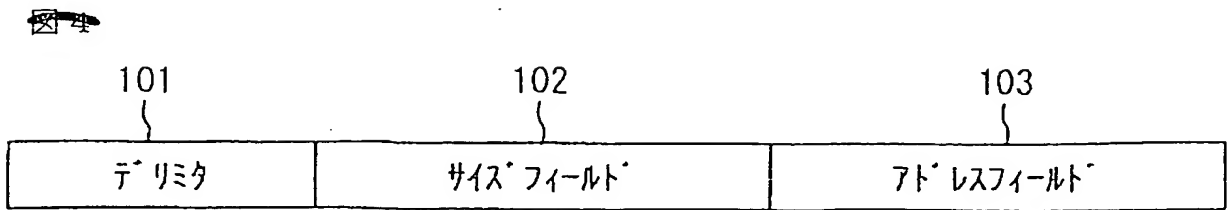


Fig. 4



101 DELIMITER
102 SIZE FIELD
103 ADDRESS FIELD

Fig. 5

図5

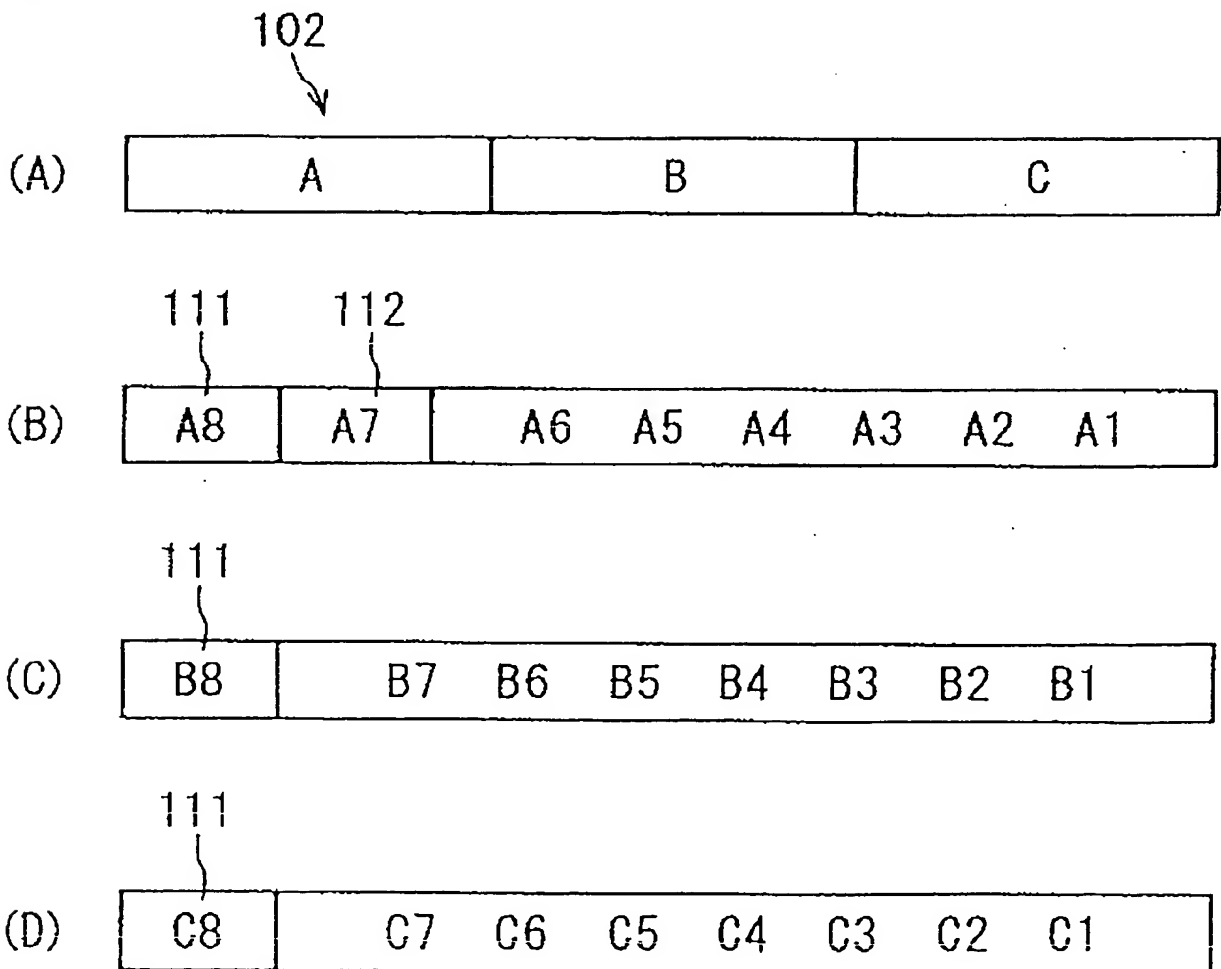


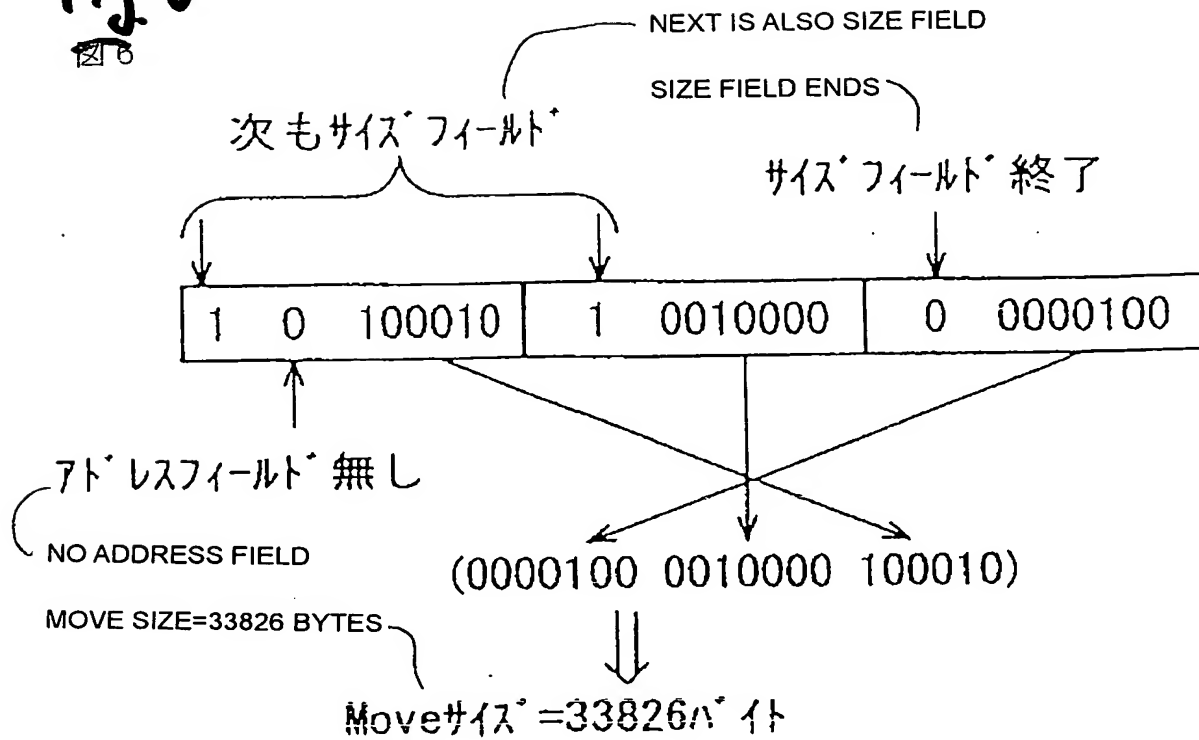
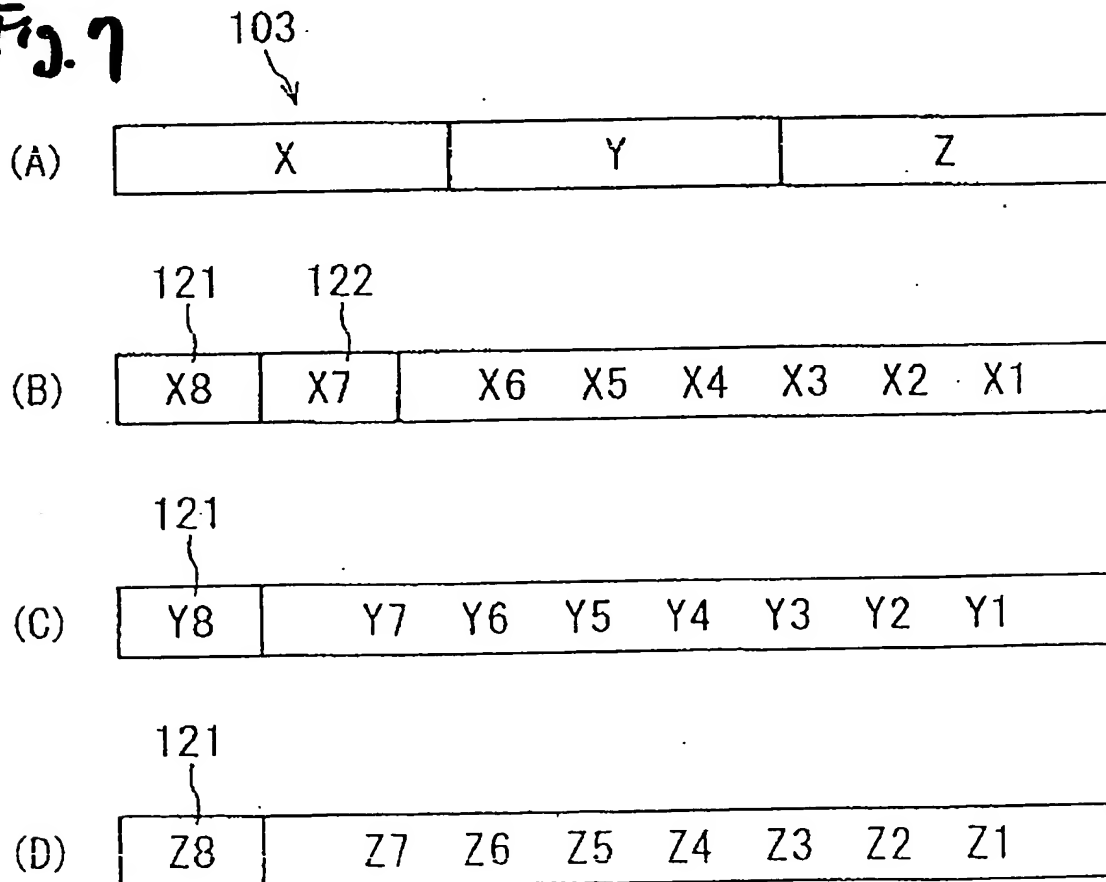
Fig. 6
図6Fig. 7
図7

Fig. 8

図 8

NEXT IS ALSO ADDRESS FIELD

ADDRESS FIELDS END

次もアドレスフィールド

アドレスフィールド終了

1	1	000100	0	1000000
---	---	--------	---	---------

相対アドレスの符号が負

SIGN OF RELATIVE ADDRESS IS MINUS

MOVE ADDRESS=-4100 BYTES

(1000000 000100)

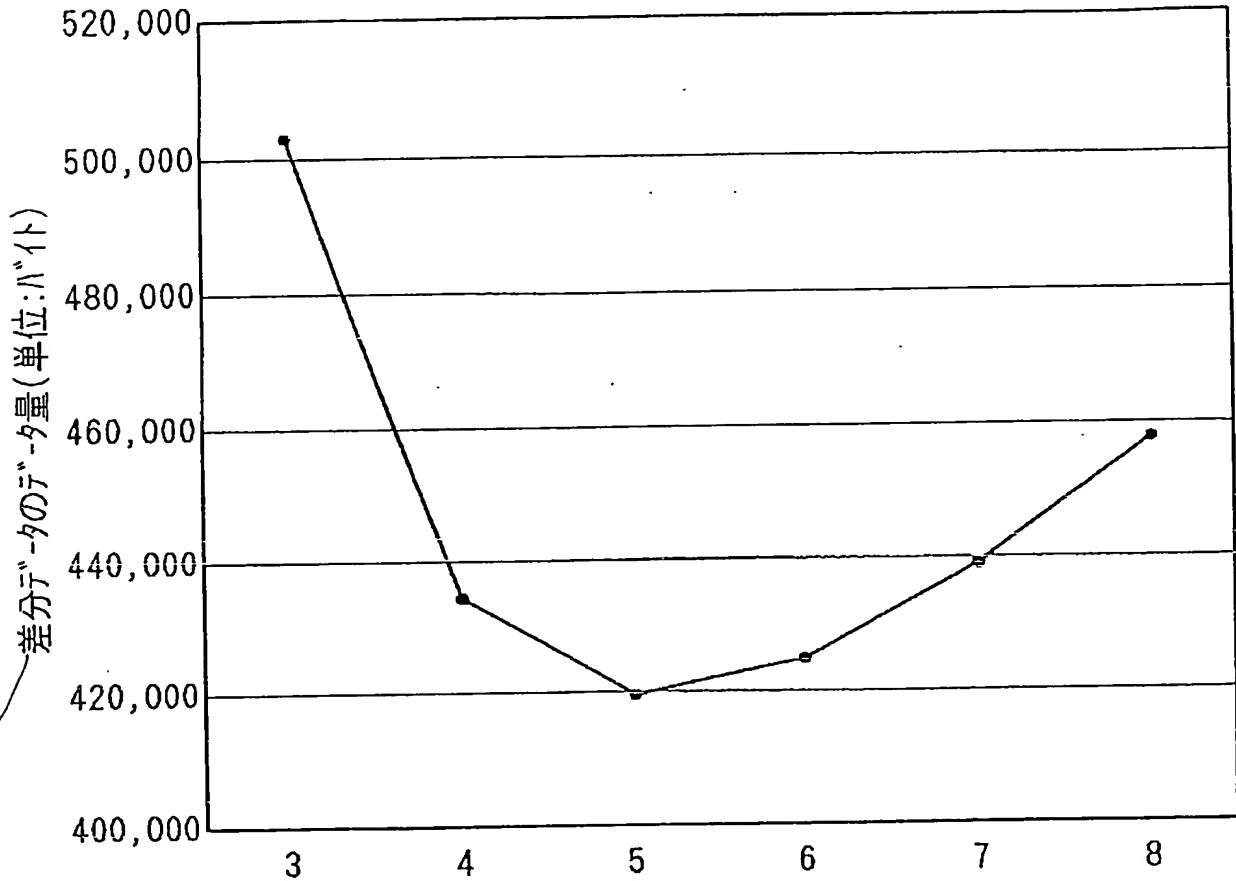
Moveアドレス = -4100バイト

Fig. 9



CHANGE IN AMOUNT OF DIFFERENTIAL DATA RELATIVE TO CHANGE IN THRESHOLD

閾値を変化させたときの差分データのデータ量の変化



AMOUNT OF DIFFERENTIAL DATA (BYTE)

閾値(単位:バイト)

THRESHOLD (BYTE)

- FIG. 10
- 31 DIFFERENTIAL DATA PRODUCING CONTROL UNIT
 - 32 PRE-UPDATING DATA STORING UNIT
 - 33 POST-UPDATING DATA STORING UNIT
 - 34 MATCHING DATA STRING SEARCH UNIT
 - 35 MOVE/ADD DETERMINING UNIT
 - 36 MOVE DATA OUTPUT UNIT
 - 37 ADD DATA OUTPUT UNIT
 - 38 DIFFERENTIAL DATA STORING UNIT
 - 39 MOVE ADDRESS STORING UNIT
 - 40 DELIMITER OUTPUT UNIT
 - 41 MOVE SIZE OUTPUT UNIT
 - 42 MOVE ADDRESS OUTPUT UNIT
 - 43 ADDRESS CHANGE DETERMINING UNIT
 - 44 ADDRESS FLAG SETTING UNIT

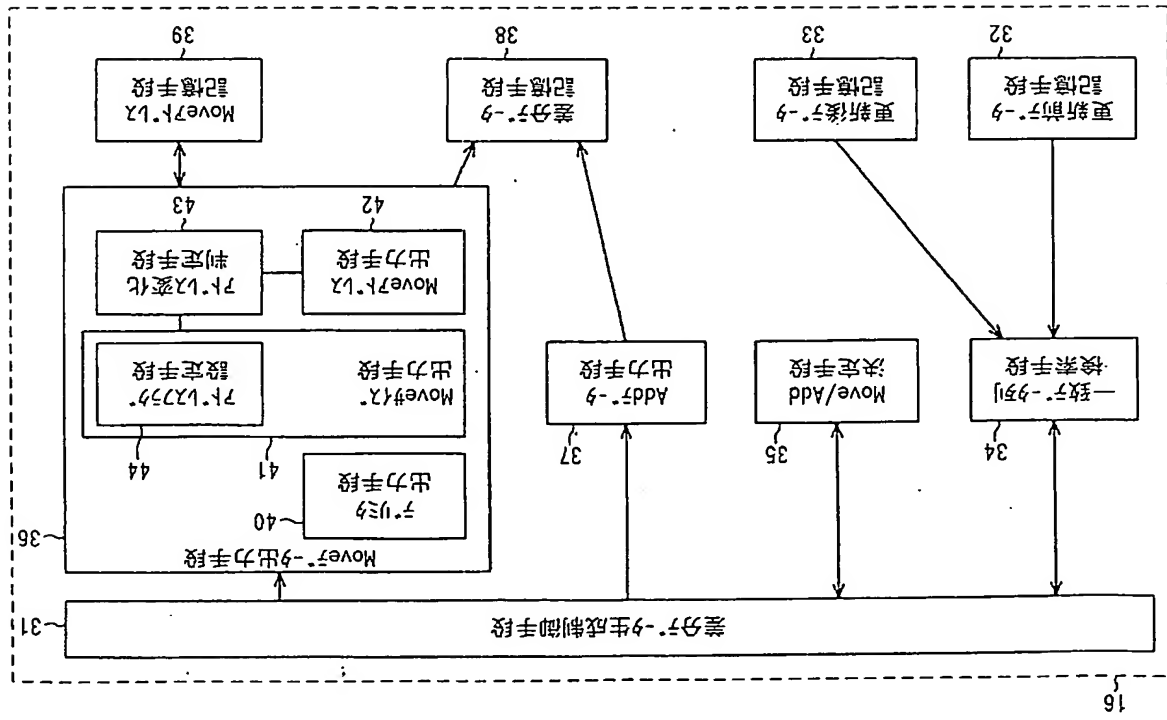


Fig. 10

- FIG. 11
- 51 POST-UPDATING FILE RESTORING CONTROL UNIT
 - 52 DIFFERENTIAL DATA STORING UNIT
 - 53 PRE-UPDATING DATA STORING UNIT
 - 54 MOVE/ADD DETERMINING UNIT
 - 55 MOVE DATA RESTORING UNIT
 - 56 ADD DATA RESTORING UNIT
 - 57 POST-UPDATING DATA STORING UNIT
 - 58 MOVE ADDRESS STORING UNIT
 - 59 MOVE SIZE DETERMINING UNIT
 - 60 MOVE ADDRESS DETERMINING UNIT
 - 61 ADDRESS CHANGE DETERMINING UNIT

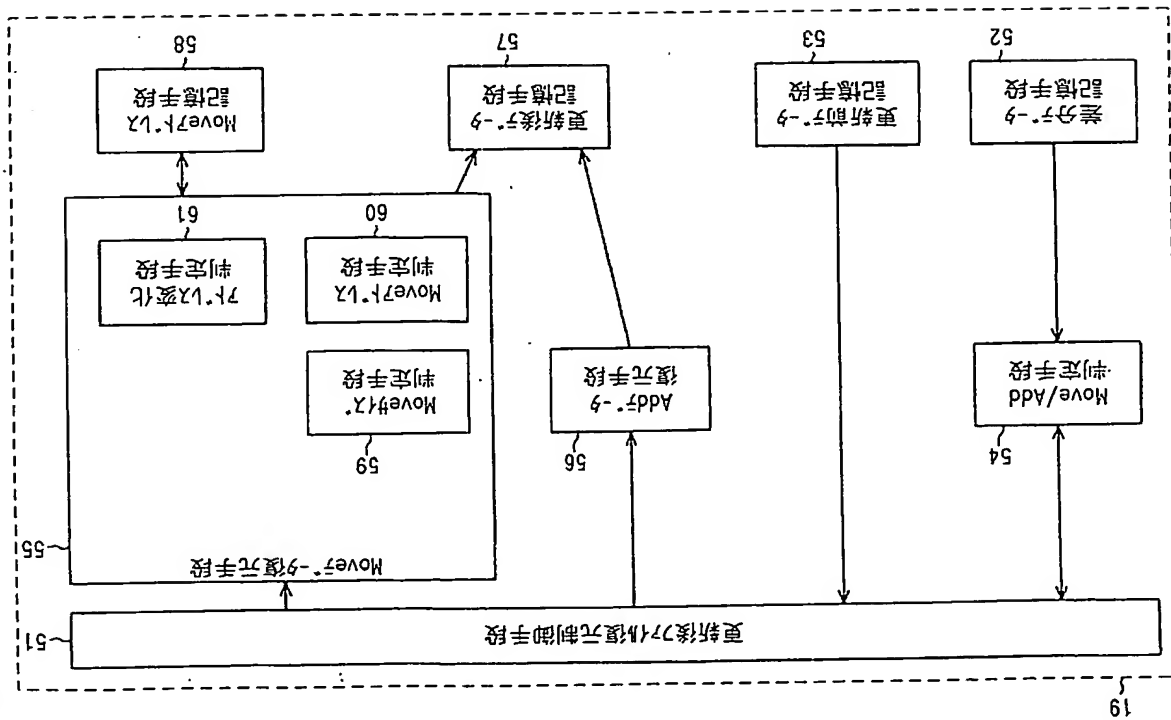


Fig. 11

FIG. 12
START
S101 SEARCH FOR MATCHING DATA STRING IN PRE-UPDATING FILE
S102 ANY MATCHING DATA STRING?
S103 MATCHING DATA LENGTH \geq THRESHOLD
S104 OUTPUT AS ADD
S105 OUTPUT DELIMITER
S106 MOVE ADDRESS = PREVIOUS ONE?
S107 ADDRESS FLAG \rightarrow 0
S108 OUTPUT MOVE SIZE
S109 ADDRESS FLAG \rightarrow 1
S110 OUTPUT MOVE SIZE
S111 OUTPUT MOVE ADDRESS
S112 STORE PRESENT MOVE ADDRESS
S113 ALL DATA PROCESSED?
END

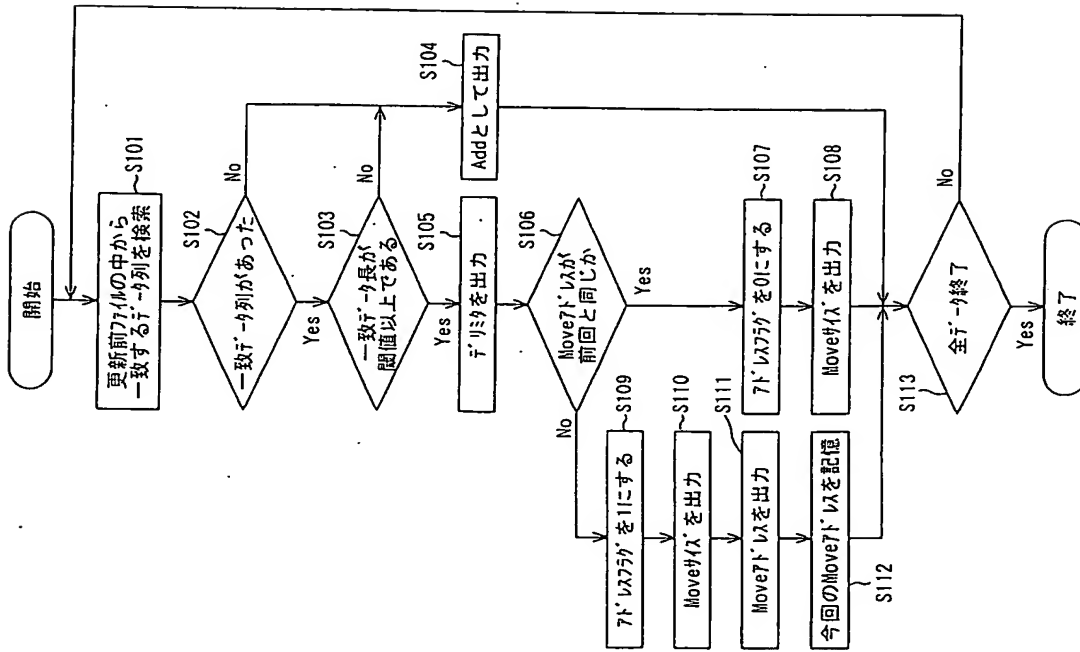


Fig. 13

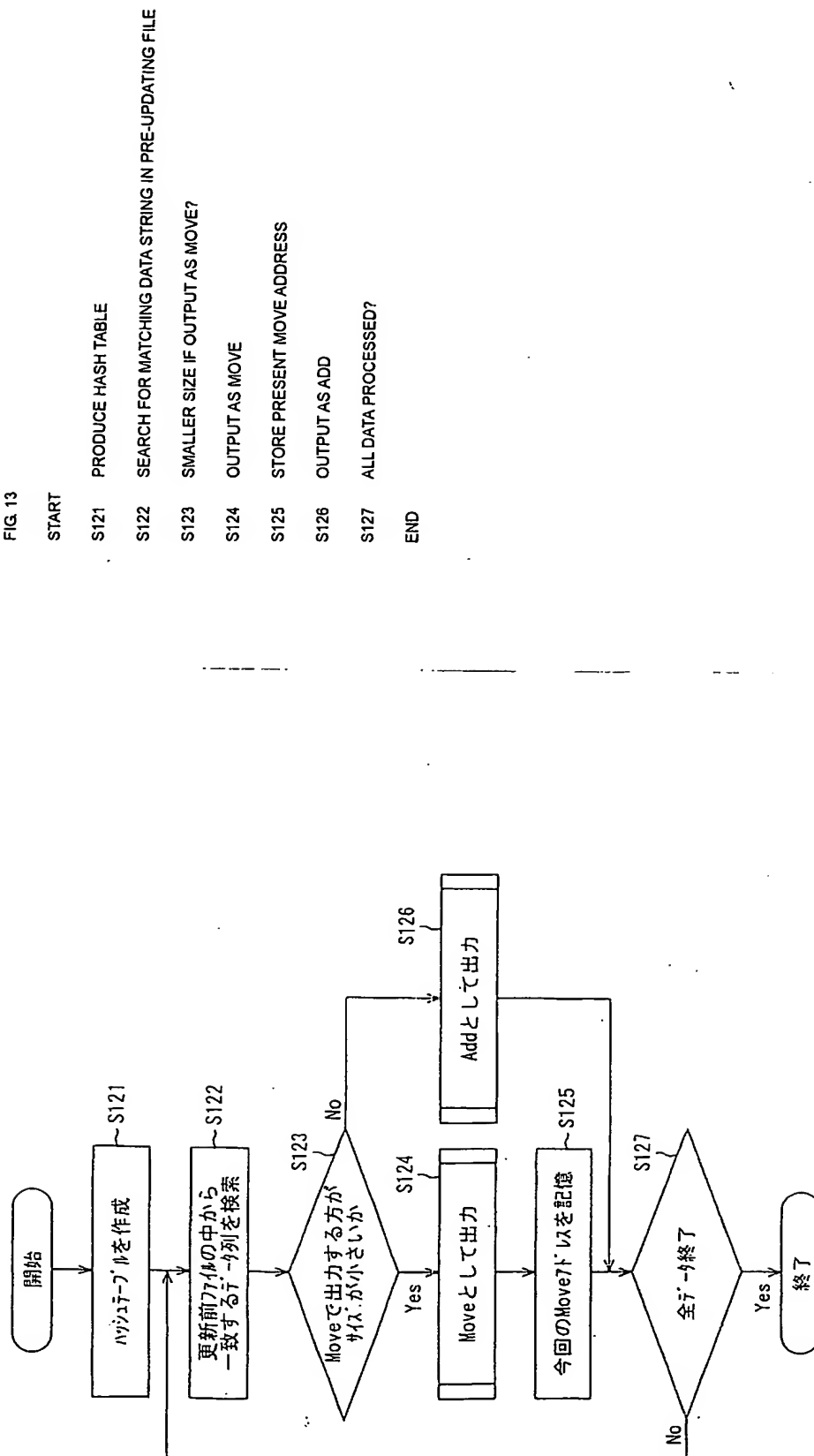


Fig. 14

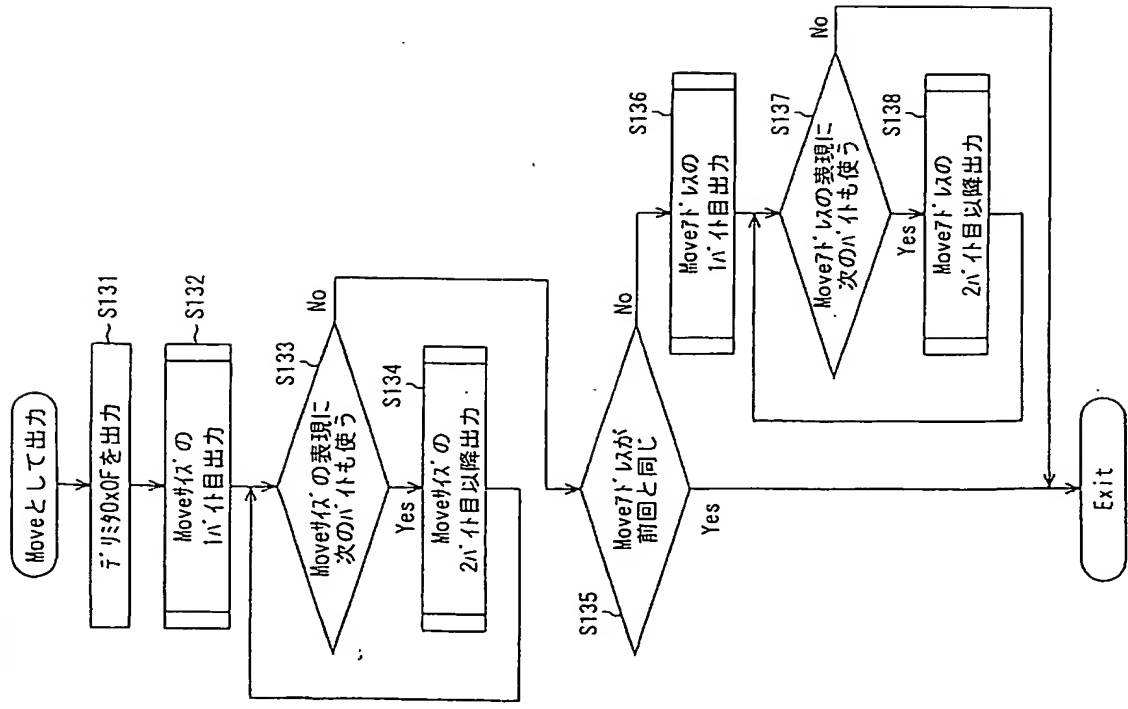


FIG. 14

OUTPUT AS MOVE

S131 OUTPUT DELIMITER 0x0F

S132 OUTPUT 1ST BYTE OF MOVE SIZE

S133 NEXT BYTE TO BE USED FOR EXPRESSING MOVE SIZE?

S134 OUTPUT 2ND BYTE AND ON OF MOVE SIZE

S135 MOVE ADDRESS = PREVIOUS ONE?

S136 OUTPUT 1ST BYTE OF MOVE ADDRESS

S137 NEXT BYTE TO BE USED FOR EXPRESSING MOVE ADDRESS?

S138 OUTPUT 2ND BYTE AND ON OF MOVE ADDRESS

Fig. 15

FIG. 15

OUTPUT 1ST BYTE OF MOVE SIZE

S141 MOVE SIZE CAN BE EXPRESSED BY 6 BITS OR LESS?

S142 MSB → 0

S143 MSB → 1

S144 MOVE ADDRESS = PREVIOUS ONE?

S145 2ND MSB → 0

S146 2ND MSB → 1

S147 OUTPUT 6 LSB OF MOVE SIZE

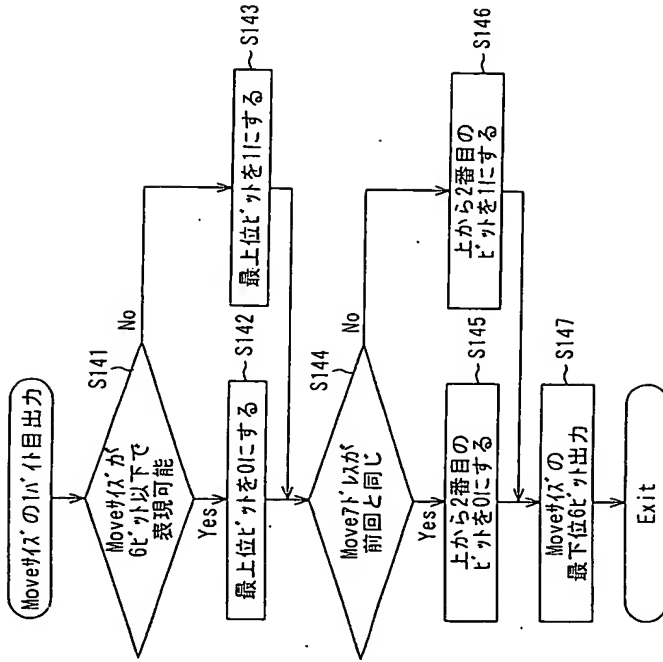


Fig. 16

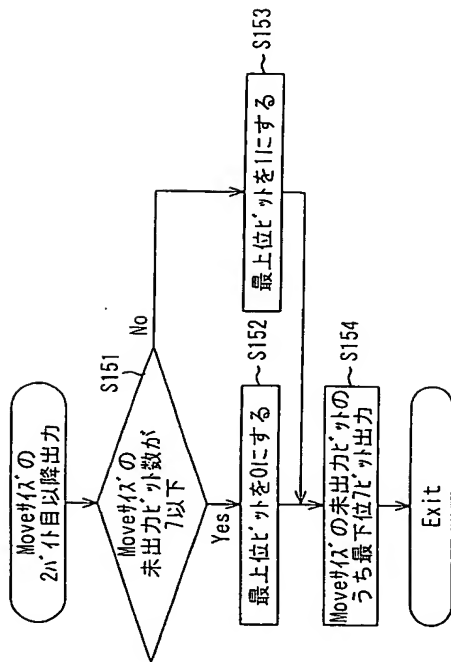


Fig. 17

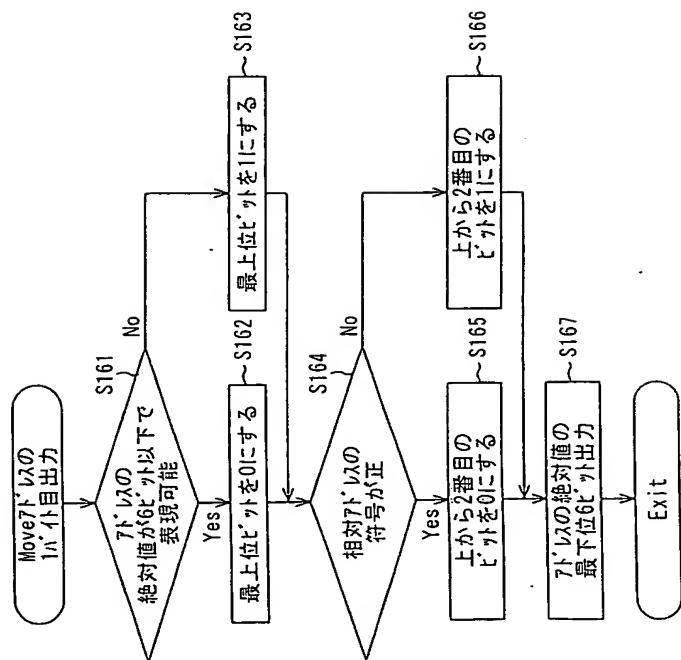


FIG. 16

OUTPUT 2ND BYTE AND ON OF MOVE SIZE

- S151 BITS YET TO BE OUTPUT OF MOVE SIZE ≤ 7 BITS?
- S152 MSB → 0
- S153 MSB → 1
- S154 OUTPUT 7 LSB AMONG BITS YET TO BE OUTPUT

FIG. 17

OUTPUT 1ST BYTE OF MOVE ADDRESS

S161 ABSOLUTE VALUE OF ADDRESS CAN BE EXPRESSED BY 6 BITS OR LESS?

- S162 MSB → 0
- S163 MSB → 1
- S164 SIGN OF RELATIVE ADDRESS = + ?
- S165 2ND MSB → 0
- S166 2ND MSB → 1
- S167 OUTPUT 6 LSB OF ABSOLUTE VALUE OF ADDRESS

Fig. 18

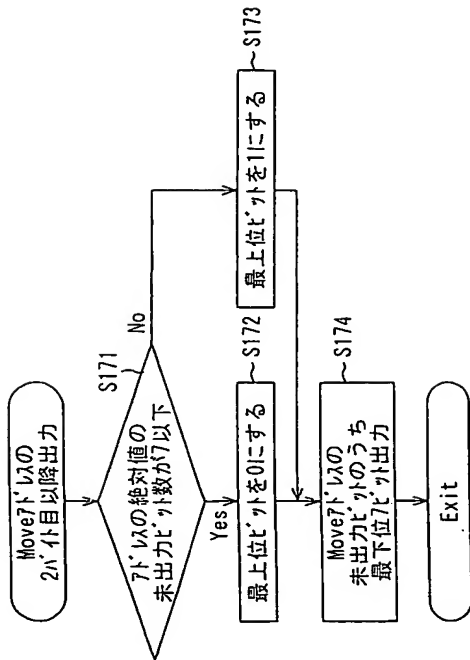


FIG. 18

OUTPUT 2ND BYTE AND ON OF MOVE ADDRESS

S171 BITS YET TO BE OUTPUT OF ABSOLUTE VALUE OF ADDRESS ≤ 7 BITS?

S172 MSB → 0

S173 MSB → 1

S174 OUTPUT 7 LSB AMONG BITS YET TO BE OUTPUT OF MOVE ADDRESS

FIG. 19

OUTPUT AS ADD

S181 OUTPUT BINARY DATA

S182 DATA = 0x0F?

S183 OUTPUT 0x00

Fig. 19

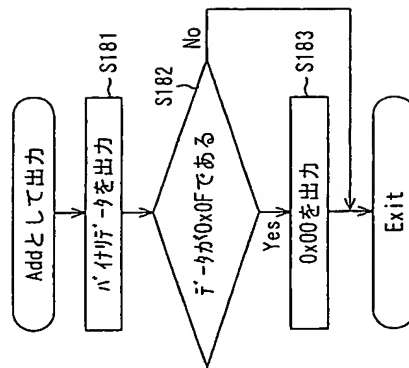


Fig. 20
図20

FIG. 20

START

S201 READ 1 BYTE AT BEGINNING

S202 READ BYTE = 0x0F?

S203 OUTPUT BYTE AS POST-UPDATING FILE DATA

S204 READ NEXT 1 BYTE

S205 READ BYTE = 0x00?

S207 RESTORING PROCESSING BY MOVE

S208 OUTPUT 0x0F AS POST-UPDATING FILE DATA

S208 DIFFERENTIAL DATA READ TO END?

S209 READ NEXT 1 BYTE

END

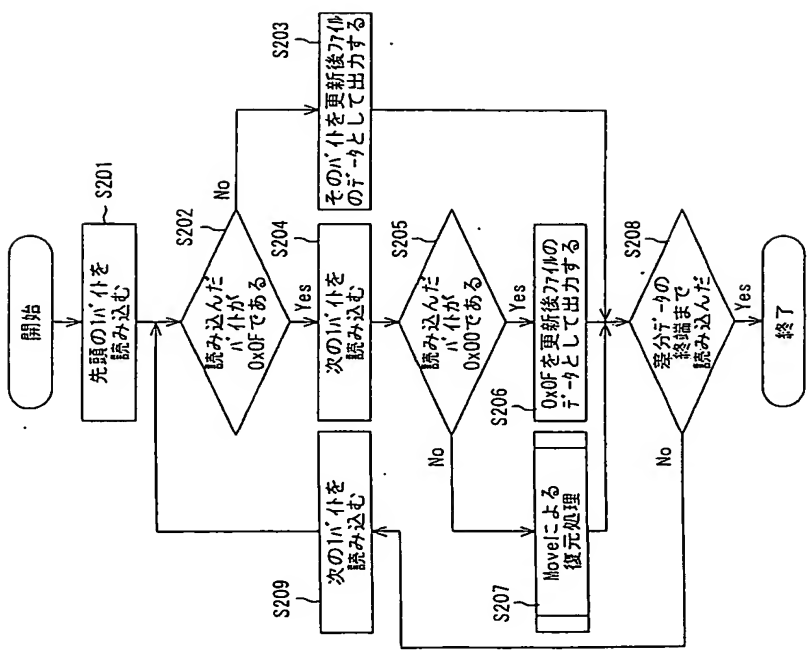


FIG. 21

RESTORING PROCESSING BY MOVE

S211 2ND MSB = 0?

S212 DETERMINE MOVE ADDRESS AS SAME VALUE AS PREVIOUS ONE

S213 MOVE SIZE DETERMINING PROCESSING

S214 MOVE ADDRESS DETERMINED?

S215 READ NEXT BYTE

S216 MOVE ADDRESS DETERMINING PROCESSING

S217 COPY DATA STRING IN PRE-UPDATING FILE BASED ON DETERMINED MOVE

SIZE AND MOVE ADDRESS AND OUTPUT AS POST-UPDATING FILE DATA

S218 STORE PRESENT MOVE ADDRESS

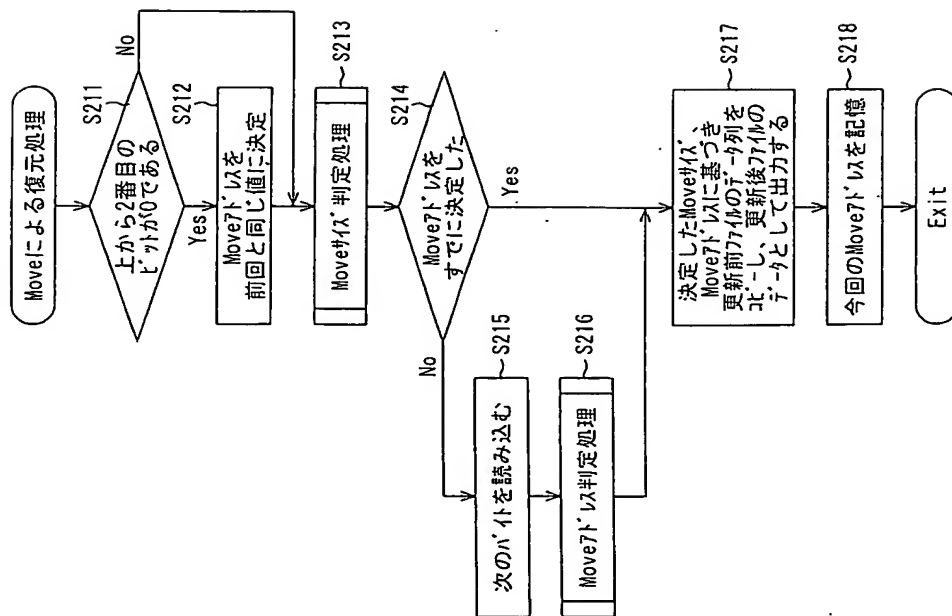


Fig. 22
図22

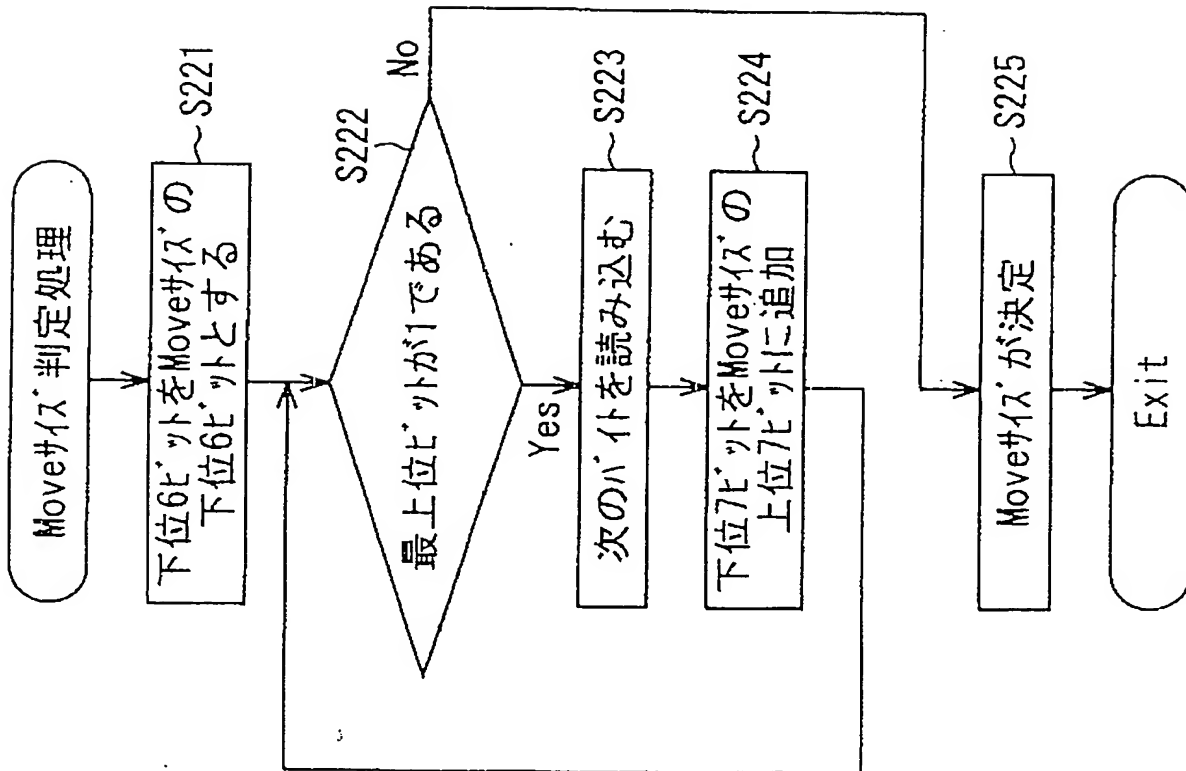


FIG. 22

MOVE SIZE DETERMINING PROCESSING

S221 SET 6 LOW-ORDER BITS AS 6 LOW-ORDER BITS OF MOVE SIZE

S222 MSB = 1?

S223 READ NEXT BYTE

S224 ADD 7 LOW-ORDER BITS TO 7 HIGH-ORDER BITS OF MOVE SIZE

S225 MOVE SIZE DETERMINED

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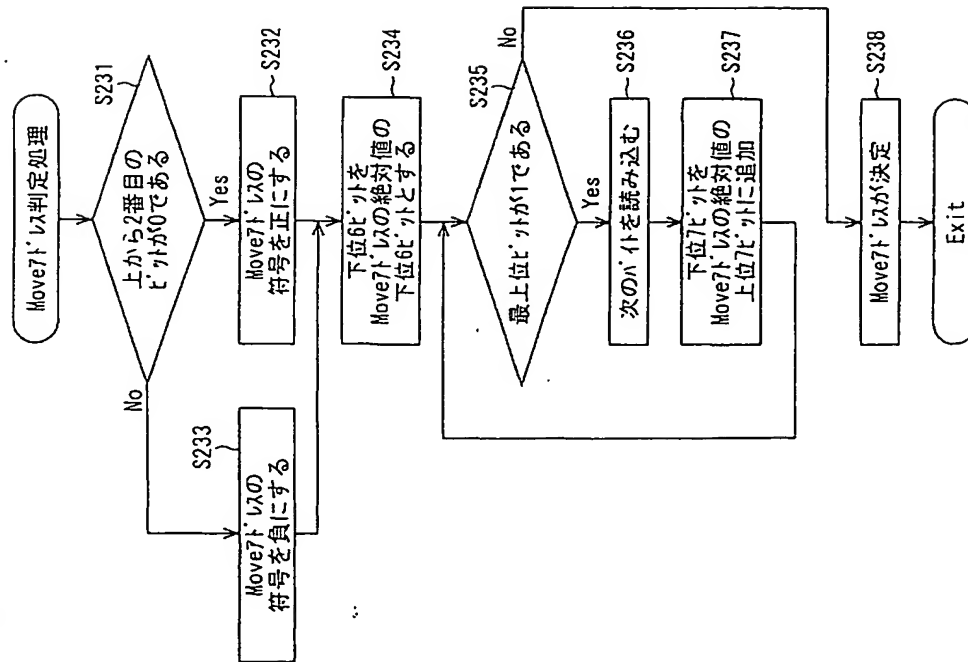


FIG. 23

MOVE ADDRESS DETERMINING PROCESSING

S231 2ND MSB = 0?

S232 SIGN OF MOVE ADDRESS → +

S233 SIGN OF MOVE ADDRESS → -

S234 SET 6 LOW-ORDER BITS AS 6 LOW-ORDER BITS OF ABSOLUTE VALUE OF

MOVE ADDRESS

S235 MSB = 1?

S236 READ NEXT BYTE

S237 ADD 7 LOW-ORDER BITS TO 7 HIGH-ORDER BITS OF ABSOLUTE VALUE OF

MOVE ADDRESS

S238 MOVE ADDRESS DETERMINED

Fig. 24

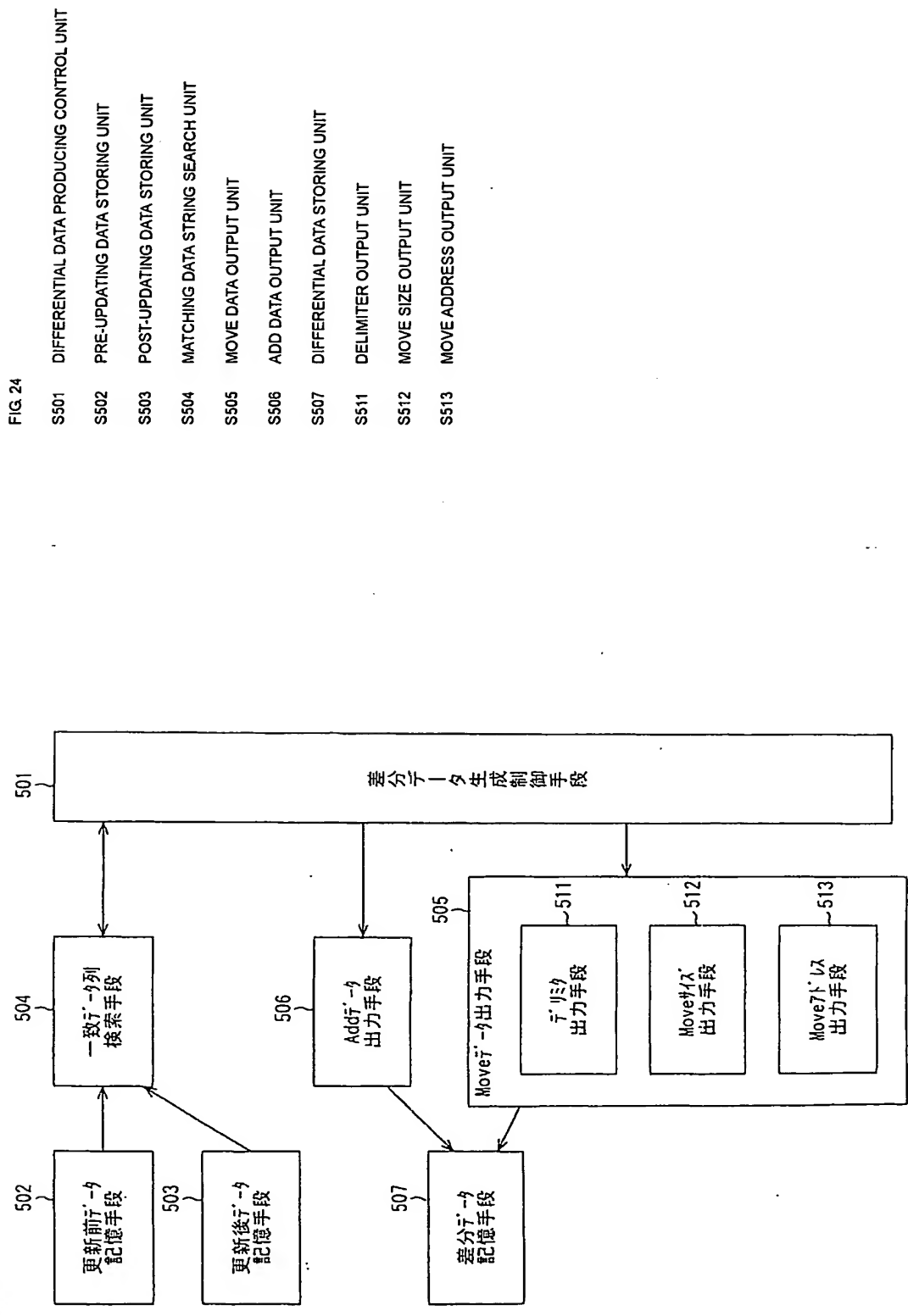


FIG. 24

- S501 DIFFERENTIAL DATA PRODUCING CONTROL UNIT
- S502 PRE-UPDATING DATA STORING UNIT
- S503 POST-UPDATING DATA STORING UNIT
- S504 MATCHING DATA STRING SEARCH UNIT
- S505 MOVE DATA OUTPUT UNIT
- S506 ADD DATA OUTPUT UNIT
- S507 DIFFERENTIAL DATA STORING UNIT
- S511 DELIMITER OUTPUT UNIT
- S512 MOVE SIZE OUTPUT UNIT
- S513 MOVE ADDRESS OUTPUT UNIT

FIG. 25

START

S501 SEARCH FOR MATCHING DATA STRING IN PRE-UPDATING FILE

S502 ANY MATCHING DATA STRING?

S503 OUTPUT DELIMITER

S504 OUTPUT MOVE SIZE

S505 OUTPUT MOVE ADDRESS

S506 OUTPUT AS ADD

S507 ALL DATA PROCESSED?

END

